

## Proposal to the America's Great Outdoors (AGO) Large Scale Collaboration and Conservation group for Ecological Site Descriptions and their use in Large Landscape Conservation

Submitted by Mary Manning, USFS Northern Region Vegetation Ecologist, Craig Engelhard, Assistant State Conservationist, NRCS, Yvette Converse, Coordinator, Great Northern LCC, USFWS 10/26/2011

## What are Ecological Site Descriptions (ESDs) and why are they useful to AGO?

Ecological sites (described in ESDs) comprise a land classification system that describes ecological potential and dynamics, ecosystem services, and responses to natural and anthropogenic disturbances of land areas at local scales. They are used to stratify landscapes and organize ecological information for purposes of monitoring, assessments, management and restoration.

An ecological site is defined as a distinctive kind of land with specific soil and physical characteristics that differs from other kinds of land in its ability to: 1) produce distinctive kinds and amounts of vegetation, and 2) respond similarly to management actions and natural disturbances. An important application and use of ESDs is to document and provide reference biotic (e.g. biotic integrity, vegetation) and abiotic (e.g. soil/site stability, hydrologic function) conditions used to assess, describe, and monitor ecosystem health.

ESDs are the "common currency" that describes the "site potential" of various landscape components, across all ownerships. They are used by multiple agencies and provide the common language for determining ecosystem status and restoration opportunities. As a result, interagency coordination is greatly improved.

## **Existing direction and documentation**

The concepts, science and policy supporting Ecological Sites are well developed, including:

- An interagency (NRCS, BLM and USFS) memorandum of understanding to guide interagency development of the manual policy and subsequent handbook.
- An interagency (NRCS, BLM and USFS) Rangeland Interagency Ecological Site Manual -- June 2010.
- The three agencies are developing a National Handbook for defining, delineating, and describing rangeland ecological sites.
- Interpreting Indicators of Rangeland Health Version 4—2005 provides a practical method for using ESDs in rangeland management.

## **Proposal**

Develop and use ESDs to guide prioritization, design and implementation of restoration through fast tracked staff work, training and agency policies. The ARS, USFS and NRCS will commit two full time employees for 2 years to:

- Define ES concepts and develop ESDs focused on the Northern Rocky Mountains, Valleys and Foothills
- Provide training to land managers on how to use ESDs